DOCUMENT RESUME

ED 260 097 TM 850 417

AUTHOR Gustafson, Glenn E.
TITLE The Public Evaluation of School Performance: A Multivariate Model of Factors Associated with Positive and Negative Assessments.
PUB DATE 31 Mar 85
NOTE 29p.; Paper presented at the Annual Meeting of the American Educational Research Association (69th, Chicago, IL, March 31-April 4, 1985).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adults; Analysis of Variance; Attitude Change; Attitude Measures; *Educational Attitudes; Elementary Secondary Education; Multivariate Analysis; *National Surveys; Path Analysis; *Predictor Variables; Problems; *Public Opinion; *Public Schools; Questionnaires; *School Attitudes; Trend Analysis
IDENTIFIERS *Gallup Poll; Logit Analysis; Log Linear Models

ABSTRACT

Data from the Gallup Polls of Public Attitudes Toward Education, administered in 1974, 1977, 1980, and 1983, were re-analyzed using multivariate analysis methods. An attempt was made to determine what segments of the public demonstrated support or non-support for the public schools. Survey responses were available for over 1500 people for each year. The respondents gave letter grades to evaluate the schools, resulting in a grade point average. These grades were analyzed using three statistical methods: (1) analysis of variance; (2) log linear analysis; and (3) path analysis. Finally, a logit analysis was performed to determine the relative strength of the variables that had a direct effect on the grades. The results showed that negative opinions were held by non-public school parents, residents of large cities, young adults under age 30, and people who felt that schools had academic problems. Positive assessments of public schools were held by public school parents, people over the age of 50, and people who felt that schools did not have academic problems. Sex, race, religion, geographic region, and social problems did not affect respondents' ratings. Results also indicated a decline in the rating between the 1974 and 1983 surveys. The questionnaire is appended. (Author/GDC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED260097

The Public Evaluation of School Performance: A Multivariate Model of Factors Associated with Positive and Negative Assessments

A paper presented to the 1985 annual meeting
of the American Educational Research Association

Glenn E. Gustafson

Principal
Glenview Public School District 34

March 31, 1985

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G. E. Gustafson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☑ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

1930 Tall Oaks Drive, Unit
Aurora, IL 60505

TM 850 417

ABSTRACT

The Public Evaluation of School Performance:
A Multivariate Model of Factors Associated
with Positive and Negative Assessments

Glenn E. Gustafson
Principal
Glenview Public School District 34, Glenview, Illinois

The study reexamines the results of the Gallup Polls of Public Attitudes Toward Education using multivariate analysis methods. The study provides a structural analysis of the national samples of the general public to determine what segments of the public have demonstrated support or non-support for the public schools using the data from the 1974, 1977, 1980 and 1983 polls. The study does this by examining the grades given to the public schools by the respondents of the Gallup Polls.

The study converts the letter grades used to evaluate the schools into a standard weighted 4.00 point marking system with 4.00 given for an "A". In this way a grade point average could be calculated. The grades are analyzed using three statistical methods which are (1) ANOVA (2) PATH ANALYSIS and (3) LOG LINEAR ANALYSIS. The results showed that negative assessments were held by (1) non-public school parents (2) people living in large cities (over 500,000), (3) young adults under 30 years of age and (4) people who felt that schools had academic problems. Positive assessments were held by (1) public school parents (2) people over 50 years of age and (3) people who felt schools did not have academic problems. The study found that gender, race, religion, region of the country and social problems (drugs, vandalism, etc.) did not hava a significant statistical effect on the grading of the public schools. Lastly, the analysis showed the overall grade point average given to the public schools has declined from 2.64 in 1974 to a low of 2.13 in 1983.

INTRODUCTION TO THE STUDY

Throughout the past ten to fifteen years, a great deal of national attention has been focused on the decline of the public's support and confidence in our nation's public schools. The media has continually shifted the national spotlight on the educational inadequacies of the public schools creating a basis for the public to doubt the quality of our schooling.

Accompanying this feeling of a lack of public confidence in our schools, a demographic change in our communities has also been taking place. Research (Raywed, 1980, p. 14) shows that... "demographic changes are rapidly bringing us to a time when a large preponderance of the adult population will not have children in school." Census figures show that during the 1970's, the percentage of adults with children in the public schools has declined from 44% to a low of only 28% in 1980. Projections indicated that by 1990, the number of people over age 55 will exceed the entire K-12 student population. (Magmer, 1982, p. 4)

A further look at the statistics on student population shows that public elementary and secondary school enrollment in the United States declined by 12.9% from 1971 through 1981 (National Center for Educational Statistics, 1984, p. 42). An examination of the family units for the same time frame indicates similar results. In 1970, there were 51 (rounded) million families of which 45% did not have children under 18 years of age (Bureau of the Census, 1970, table 54). By 1980, the total number of families had increased to 59 (rounded) million and the percentage of families

not having children under 18 years of age had also risen to 49% (Bureau of the Census, 1980, table 267). In addition to the percentage of families not having children, the statistics also show a rising number of single adults throughout the country.

As the statistics suggest, non-parents (including older citizens) now comprise the majority of most school district's eligible voters. It is not surprising, therefore, that districts are finding on eroding support base in their communities. With the population becoming heavily weighted toward the older portion of our society, other implications can be felt by school districts. Education does not rate as high a priority concern for non-parents as it does for parents of school-aged children. Educational needs instead compete with the many divergent interests attitudes and needs of the non-parent population.

As public confidence declines and non-parents begin to take control as the voting majority for most communities, effects can be noted in the changing financial structure of many school districts. As taxpayers, non-parents no longer consider the interests of the school districts as a primary target for their support. Instead, "taxpayer attitudes may contribute to defeat of a bond issue election, defeat of board incumbents and formation of formal groups control of the public school." (Hatley and Croskey, 1978, p. 59)

Supporting evidence for this opinion can be found in the results of public school bond elections as reported in the Digest of Educational Statistics (National Center for Education Statistics, 1981). The statistics show that the approval rate has fallen from a high of 72%

in the early 1960's to a low of 46% in the mid 1970's. Apparently this negative trend has made many districts cautious because the total number of elections has also decreased by almost 60%.

With over 1,000 school districts to watch, Illinois provides a particularily good illustration of this decline of voter approval for school referenda. According to data collected by the Illinois State Board of Education (1984), local communities voted against school district tax increase requests in 80% of the referenda held in 1980-81, 79% in 1981-82, and 71% in 1982-83.

Clearly, the statistics seem to indicate that the public is losing confidence in our public schools. Likewise, various reports and articles have also focused national attention on the problems of our education programs. For example, the report by the National Commission on Excellence in Education entitled A Nation at Risk, (1983, p. 5), has aroused the belief that our schools are merely mediocre. The report points out many of our school's failings and suggests numerous improvements. It substantiates the feeling that much is wrong with our schools.

Another report which provides an annual impression of the public's attitude regarding education is the Gallup Poll report. This report has documented a variety of the public's opinions about our schools over the past 15 years. A close examination of its findings can provide more information regarding the loss of public confidence in our schools.

BACKGROUND ON THE GALLUP POLL OF PUBLIC ATTITUDES TOWARD EDUCATION

In 1969, the first Gallup Poll of Public Attitudes Toward Education was released to the media. Since that time, this annual poll has become a barometer for indicating the general public confidence in our nation's schools. Each year it gives educators information in a variety of areas about the relative strengths and weaknesses of our schools as perceived by the American public. In particular, since 1974, the poll has asked the respondents to grade their local schools by using the traditional A, B, C, D and F marking system. The grading system provides us with a simple and efficient standard by which to judge changes in the public's attitudes about schools.

An examination of the grades (TABLE 1) given to the public schools over the last decade, indicates that there has been a steady decline in the grade scores.

TABLE 1

Year	% - A and B	% - C, D and F	% Don't Know
1974	48	32	20
1975	43	44	13
1976	42	44	14
1977	37	44	19
1978	36	49	15
1979	34	48	18
1980	35	47	18
1981	36	54	10
1982	37	52	11
1983	31	52	17

A review shows that in 1974, 48% of the respondents gave the schools an A or B grade. By 1983, that percentage had declined to 31%, while

the percentage of C, D and F grades has increased to over 50% of the respondents. In addition, 18% of the respondents gave an A grade in 1974 while in 1983 only 6% gave an A.

In an effort to examine the reasons for the public's attitude, the poll attempts to clarify specifically what issues the public views as critical problems by asking another annual question (Elam, 1984, p. 17): What do you think are the biggest problems with which the public schools in this community must deal (p. 17)?

In answering, the respondents select from a list of potential problem areas. In the 10 years since 1974, the five problem responses which were most chosen are: (a) lack of discipline, (b) integration/segregation, (c) use of dope, drugs, (d) lack of proper financial support and (e) difficulty in getting good teachers (Elam, 1984, p. 17).

The public has selected responses which seem to describe schools as a place where problems regularly occur. The public seems to perceive schools as having problems controlling students. In addition, they seem to suspect that the quality of education is impaired through the lack of funds and good teachers.

The results of the Gallup Poll clearly points to some serious problems facing our nation's schools. In 1978, Gallup (Elam, 1978, p. 5) himself commented that, "educators should no longer assume that citizens feel deeply committed to support public school education... Periodically, the public needs to be reconvinced that education is all important."

The task of restoring public confidence in our schools is not an easy one. Educators need to reanalyze their current practices to determine effective methods of improving our schools. They must

also reanalyze their communities and begin to recognize that their constituency is now comprised of a majority of people who do not have children in their schools. Educators should find out more information about the new majority in order to ascertain their communities' attitude about their local schools. In this manner, educators will be better able to understand the needs and interests of the various publics in their community. An increased knowledge of their community will also allow educators to be better able to compete for their share of community support to meet the needs of the local schools.

The purpose of this paper will be to examine attitudes of the public by statistically reexamining the data provided by the Gallup Polls. The data from the polls contains a great deal of information which should enable educators to develop a better understanding of who is giving our schools high or low grades.

DESIGN OF THE STUDY

The study reexamines the results of the Gallup Polls of Public Attitudes Toward Education using multivariate analysis methods. The study provides a structural analysis of the national samples of the general public to determine what segments of the public have demonstrated support or non-support for the public schools since 1974. The study does this by examining the grades given to the public schools by the respondents of the Gallup Polls.

DATA COLLECTION

The Roper Center was contacted in order to acquire all of the code books for the original data from its inception in 1969 to the

present for the Gallup Pools of Public Attitudes Toward Education. The center sent all the data exclusive of the years 1969, 1970, 1971, 1975 and 1984 which were unavailable. Since the research was interested in studying the change in the public's attitude over time, the data was examined to determine those items which were used consistently on each of the polls. By examining only these items, change on responses by the respondents could be measured over time.

After examination, it was decided that only the results of the 1974, 1977, 1980 and 1983 polls would be used for this research. This decision was made for two reasons. First, respondents were not asked to grade the schools until 1974. Since grading is an important variable in the study, only the results of the polls from 1974 to the present could be used. Second, as mentioned previously not all of the code books were available for the time period after 1974. Therefore, the three year interval was selected in order to correspond to the availability of the data. The examination of data found 38 items which were repeated on each of the polls for the years after 1974. (APPENDIX A)

The polls incorporated a national population of respondents. The sample size for each of the years being examined were: 1,544 respondents in 1974, 1,507 respondents in 1977, 1,530 respondents in 1980, and 1,540 respondents in 1983. The respondents in each of the samples were individually interviewed for their response.

ANALYSIS OF THE DATA

The repeat items were studied for each of the years to determine which variables significantly influenced the grading of the public schools either high (A, B) or low (C, D, F). For the purpose of statistical comparison all letter grades were converted into a standard weighted 4.00 point marking system with 4.00 being given for an "A". In this way, a grade point average (GPA) could be calculated. A series of cross tabulations using the repeat items were run to determine the most frequently responded to items. From this examination, the determination was made as to which variables were used for the purpose of this study.

Those variables were (A) age (B) gender (C) public school parent (D) non-public school parent[1] (E) city size (F) education (G) race (H) region of the country [2] (I) religion[3] (J) grade given to schools (K) academic problems [4] and (L) social problems.[5]

[1] Non public parents are adults which have (1) no children (2) children in private schools, (3) children not of school age.

[2] Due to the amount of potential responses for the region variable, it was felt that insufficient cell size would result when the item was statistically analyzed. In order to prevent small cell size from occurring, the variable was dichotomized into South and Southwest compared to all other region responses.

[3] In order to prevent small cell sizes, religion was dichotomized into Roman Catholic compared to all other religion responses.

[4] Respondents were asked to select their choice from a list of the most significant educational problems. Because of the number of alternative responses, small cell sizes would probably result which would effect the statistical analysis. To counteract this problem, the category called academic problems was developed.

Since a grade point average was calculated, subjects could be placed on a continuum that was considered interval in nature. Therefore the use of analysis of variance (ANOVA) testing techniques was appropriate for use with the data. The GPA was then determined to be the dependent variable of the study. The data was analyzed using the ANOVA technique to determine the statistical significance of the relationship between the selected variables and the GPA.

From the results of the ANOVA, it was found that several of the variables influenced the GPA at the .01 or .05 level of significance. Given the known association between such items as age, education, parenthood and some of the other variables, testing was conducted to further analyze both the structure and strength of the variables relationship with the GPA. To do this, the GPA was dichotomized into high (A, B) and low (C, D, F) grades. Then the log linear methods developed by Goodman and Fienberg were used on the data.

Acacemic problems were identified as: (1) lack of qualified teachers (2) poor curriculum (3) teachers lack of interest and (4) lack of proper facilities. These individual variables were grouped into the one category called academic problems because the variables were the most frequently selected responses chosen from the list of educational problems (in the academic category) since 1974.

[5] For the same reason as the academic problems, a variable called social problems was created. Social problems were identified as (1) lack of discipline (2) drinking/alcholism (3) crime/vandalism (4) pupil lack of interest and (5) use of dope, drugs.

A path analysis was performed to determine the structure of the relationship between the selected variables and their effect on high or low grades. The path analysis was able to identify variables which have a direct effect on grades.

Finally, a logit analysis was performed to determine the relative strength of the variables which have a direct effect on grades. The logit analysis uses a Coefficient of Mutiple - Partial Determiniation (CMPD) which was used to explain the percent of total mutual dependence each of the variables had on the high or low grading of the public schools.

RESULTS OF THE STUDY

As mentioned previously in the section on the analysis of the data, twelve variables were initially selected for study. Five variables were eliminated from the report after a preliminary examination of the data. These were (A) gender (B) race (C) region of the country (D) religion and (E) social problems.

These variables were analyzed using ANOVA and Path analysis. In all cases except for social problems[6], the data did not yield a level of significance at either the .01 or .05 levels. Since these variables did not significantly influence the grading of the public schools, they were not used in the final analysis of the data.

[6] Social problems did show significance at the .01 level on the ANOVA conducted on the 1977 data only. Since the other three years were not significant, it was not included in the report.

ANOVA TESTING RESULTS

The remaining variables which were tested using the ANOVA techniques were (A) public school parent (B) non-public school parent (C) city size (D) education and (E) academic problems. Each of these variables were tested to determine their effect on the grades given to public schools.

The results are shown in Table 2. The analysis shows that parenthood, age, city size and academic problems each had a main effect at the .01 or the .05 level of significance for all four years. Education had a main effect only in 1983. These results confirm a relationship between the individual variables and the grades given to the public schools.

Table 2 also provides a list of all the grade point averages for each of the variables. For the purpose of this study each of the variables was either dichotomized or trichotomized to provide more specific data. The results showed a steady decline in the total GPA for all four years. In particular, non-public school parents, people living in cities over 500,000, people under 30 years of age, and people who felt there were academic problems in the schools each consistently graded the schools as unsatisfactory. People who graduated from college did not differ from non college respondents in the same consistent pattern as the other variables on their grading of the public schools.

PATH ANALYSIS RESULTS

In order to better determine the structure of the relationships of the variables to the grades given to public school, a path analysis was conducted on the same data distribution for each of the four years.

TABLE 2
RESULTS OF THE ANOVA

	1974	1977	1980	1983
MAIN EFFECTS				
Parent	.000	.000	.000	.000
Size	.001	.001	.000	.029
Age	.000	.000	.000	.000
Academic Problems	.000	.000	.000	.000
Education	none	none	none	.03
2 Way Interactions	none	Parent/Age = .015	Size/Educ. = .003 Size/Age = .004	Parent/Age = .
3 Way Interactions	none	Size/Educ./Age = .002	Parent/Size/ Age = .028	none
GRADE POINT AVERAGE TOTAL	2.64 (1213)[1]	2.35 (1218)	2.25 (1243)	2.13 (1277)
Public School Parent	2.81 (578)	2.58 (456)	2.43 (407)	2.30 (390)
Non Public School Parent	2.49 (635)	2.21 (762)	2.17 (835)	2.06 (887)
City Under 10,000	2.70 (395)	2.40 (377)	2.39 (369)	2.14 (517)
City Under 500,000	2.74 (464)	2.43 (455)	2.31 (280)	2.35 (141)
City Over 500,000	2.45 (353)	2.19 (386)	2.05 (393)	2.08 (619)
Under 30 Years	2.47 (288)	2.11 (361)	2.04 (393)	1.98 (378)
30-49 Years	2.65 (530)	2.43 (455)	2.36 (448)	2.11 (500)
Over 50 Years	2.75 (395)	2.47 (401)	2.34 (402)	2.31 (400)
No College Education	2.68 (826)	2.36 (847)	2.24 (863)	2.11 (870)
College Education	2.57 (386)	2.32 (370)	2.29 (380)	2.19 (407)
No Academic Problems	2.72 (974)	2.48 (873)	2.37 (1033)	2.20 (1019)
Some Academic Problems	2.32 (214)	1.99 (339)	1.69 (209)	1.86 (259)

[1] Numbers in parenthesis are cell frequencies which do not include responses in the "don't know" category.

Figures one through four represent the models of the path analysis. Dotted lines are used to indicate the direct paths between the variables and the grades given to public schools. Solid lines are used to show indirect paths to grades for public schools.

The path analysis indicates that except for education in 1974 the variables of age, academic problems, city size, and parenthood had significant direct associations with grades given to public schools. All of the paths shown in the model are significant at the .01 or .05 level of significance.

By examining the dichotomized and trichotomized variables, further analysis shows more about the associations present in the direct paths. Grades of non-public school parents were significantly (.01 level) more unsatisfactory than public school parents. Other variables associated with low grades were (A) non-public school parents under 30 years of age (B) people living in cities over 500,000 and (C) people who regard the public schools as having academic problems.[7] People who did not graduate from college also graded schools more unsatisfactorily in 1977, 1980 and 1983. Although the relationship was at the .05 level not the .01 level of significance. These results are consistent with the results of the ANOVA testing but better our understanding of the structure of these independent variables on grades given to public schools.

[7] These variables were all significant at the .01 level except for people under 30 years of age in 1974 (.05) and (B) people living in cities over 500,000 in 1983 and 1977 (both .05).

FIGURE 1

1974

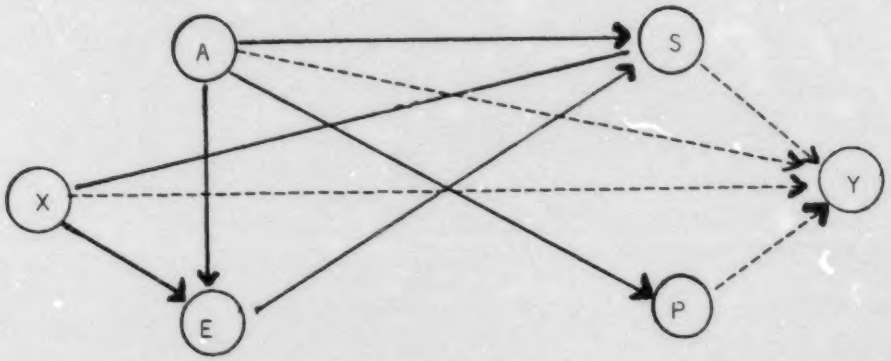

Figure 1: A Path Model to Predict Grades for Public Schools

FIGURE 2

1977

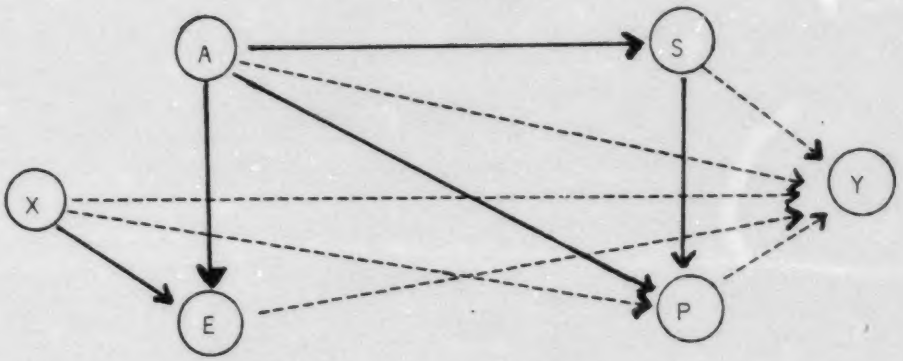

Figure 2: A Path Model to Predict Grades for Public Schools

Legend

X = Academic Problems (none, some)
A = Age (Under 30, 30-49, over 50)
E = Education (noncollege, college)
S = City Size (under 10,000, 10,000 to 500,000, over 500,000)
P = Parent (public, nonpublic)
Y = Grade given to public schools (A or B; C, D or F)
Satisfactory A or B; Unsatisfactory C, D or F

FIGURE 3

1980

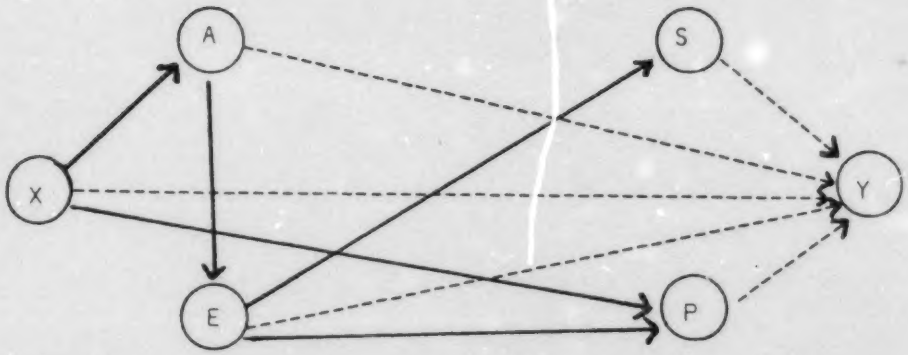

Figure 3 : A Path Model to Predict Grades for Public Schools

FIGURE 4

1983

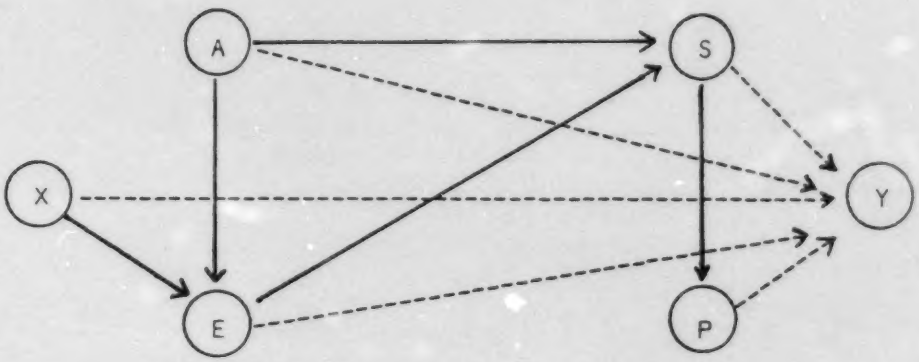

Figure 4: A Path Model to Predict Grades for Public Schools

Legend

X = Academic Problems (none, some)
A = Age (Under 30, 30-49, over 50)
E = Education (noncollege, college)
S = City Size (under 10,000, 10,000 to 500,000, over 500,000)
P = Parent (public, nonpublic)
Y = Grade given to public schools (A, or B; C, D or F)
Satisfactory A or B; Unsatisfactory C, D or F

LOGIT ANALYSIS RESULTS

The path analysis confirmed that the five variables all have a significant direct association with grades given to public schools. It would be useful, however, to know the relative strength of each of those direct paths upon the grading of the public schools. A log - linear logit analysis was performed to determine the strength of the relationships. Tables three through six show the logit models. The models seek to explain the amount of the total mutual dependence. This is reflected in the coefficient of Multiple - Partial Determination (CMPD).

An examination of the models shows that the variables of age, parenthood and academic problems (except for 1983 when it was 38 percent) accounted for more than 40 percent of the total mutual dependence. The joint effect of all five variables for each of the years was (A) 50 percent in 1974 (B) 61 percent in 1977 (C) 61 percent in 1980 and (D) 46 percent in 1983. The results reflect strong association between the variables and the grades given to public schools.

SUMMARY

A review of the results leads to some summary statements regarding the publics' assessment of the public schools. The analysis identified some variables which significantly effected the grades given to the public schools on the Gallup Polls for the years 1974, 1977, 1980 and 1983.

First, it was noteworthy to observe that the analysis demonstrated that (A) gender (B) race (C) religion (D) region of the country and (E) social problems did not have a significant statistical

TABLE 3

Logit Model to Predict Grades for Public Schools

1974

Models	df	LRX2	CMPD
XPSEA,Y	71	139.48	--
XPSEA, YX	70	113.70	.185
Difference due to YX		25.78	.185
XPSEA,YX,YP	69	90.00	.355
Difference due to YP		23.70	.170
XPSEA, YX, YP, YS	67	78.68	.431
Difference due to YS		11.32	.081
XPSEA, YX, YP, YS, YE	66	78.52	.432
Difference due to YE		.16	.001
XPSEA, YX, YP, YS, YE, YA	64	69.72	.495
Difference due to YA		8.8	.063

TABLE 4

Logit Model to Predict Grades for Public Schools

1977

Models	df	LRX2	CMPD
XPSEA, Y	71	212.26	--
XPSEA, YX	70	169.64	.201
Difference due to YX		42.62	.201
XPSEA, YX, YP	69	128.30	.396
Difference due to YP		41.34	.195
XPSEA, YX, YP, YS	67	119.87	.436
Difference due to YS		8.43	.040
XPSEA, YX, YP, YS, YE	66	115.65	.456
Difference due to YE		4.22	.020
XPSEA, YX, YP, YS, YE, YA	64	83.37	.608
Difference due to YA		32.28	.152

Legend

X = Academic Problems (none, some)
A = Age (Under 30, 30-49-, over 50)
E = Education (noncollege, college)
S = City Size (under 10,000, 10,000 to 500,00, over 500,000)
P = Parent (public, nonpublic)
Y = Grade given to public schools (A or B, C, D or F)

df = degrees of freedom
LRX2 = likelihood ratio chi-square
CMPD = coefficient of multiple-partial determination

TABLE 5

Logit Model to Predict Grades for Public Schools

1980

Models	df	LRX2	CMPD
XPSEA, Y	71	140.40	--
XPSEA, YX	70	113.03	.195
Difference due to YX		27.37	.195
XPSEA, YX, YP	69	98.12	.301
Difference due to YP		14.91	.106
XPSEA, YX, YP, YS	67	85.55	.391
Difference due to YS		12.57	.090
XPSEA, YX, YP, YS, YE	66	79.83	.431
Difference due to YE		5.72	.040
XPSEA, YX, YP, YS, YE, YA	64	54.75	.610
Difference due to YA		25.08	.129

TABLE 6

Logit Model to Predict Grades for Public Schools

1983

Models	df	LRX2	CMPD
XPSEA, Y	71	136.98	--
XPSEA, YX	70	126.06	.08
Difference due to YX		10.92	.08
XPSEA, YX, YP	69	116.68	.148
Difference due to YP		9.38	.068
XPSEA, YX, YP, YS	67	108.47	.208
Difference due to YS		8.21	.06
XPSEA, YX, YP, YS, YE	66	104.41	.238
Difference due to YE		4.06	.03
XPSEA, YX, YP, YS, YE, YA	64	74.39	.457
Difference due to YA		30.02	.219

Legend

X = Academic Problems (none, some)
A = Age (Under 30, 30-49, over 50)
E = Education (noncollege, college)
S = City Size (under 10,000, 10,000 to 500,000, over 500,000)
P = Parent (public, nonpublic)
Y = Grade given to public schools (A or B; C, D or F)

df = degrees of freedom
LRX2 = likelihood ratio chi-square
CMPD = coefficient of multiple-partial determination

effect on the grading of the public schools. This is particularly important information since it runs contrary to what might generally be considered as conventional educational thinking. For example, educators have generally assumed that women were more favorable in their assessment of schools than men. The results showed that there was no statistical difference between the sexes.

Each year social problems (discipline, use of drugs, crime, etc.) head the Gallup Poll list of major probiems facing education. Educators have assumed that people who believe that there are social problems in the public schools have a negative image of the schools. The results showed that there was no significant difference except in 1977 on the grades given to the schools. On the other hand, academic problems did have a significant effect on the publics' assessment. Conventional educationl thinking would probably have reversed these results.

Second, the analysis identified that certain variables had a significant statistical effect which lead to a negative assessment of the public schools. Non-public school parents, people living in large (over 500,000) cities, young adults under 30 years of age and people who felt that schools had academic problems all gave lower grades to the public schools. Educators should examine their communities and determine if portions of their population fail in these categories. If so, efforts should be made to counteract the probable negative view this portion of the public holds for the public schools.

Third, the analysis identified that there were portions of the public which held the schools in high regard. Public school

parents, people over 50 years of age, and people who felt schools did not have academic problems gave significantly higher grades to the public schools. Educators need to focus their efforts upon maintaining the positive assessment that these groups have for the public schools. Academic achievement is important to the public and schools must inform their communities of their academic successes. Educators need also to reevaluate their relationship with the older people in their community since these people seem to be a support group for the schools.

Lastly, the analysis showed the overall grade point average given to the public schools has declined from 2.64 in 1974 to a low of 2.13 in 1983. The results show that the public no longer assesses the public schools as positively as they did in the early 1970's. Clearly, the analysis points out that the decline in public confidence is not a media condition but a statistical fact. The analysis provided data which showed that parenthood, age, education, size of the community and academic problems each have a direct relationship with the grades given to the public schools. These results should assist educators to develop more effective strategies to rebuild the positive public assessment of the public schools.

APPENDIX A

Questionnaire Item Statements

Questionnaire Item Statements Which were

Repeated on Each Gallup Poll Since 1974

---

1. As you know, in some communities there are three kinds of schools -- the public schools, the parochial (or church-related) schools, and the private schools (sometimes called "independent" schools). First, I'd like to know if you, yourself, have any children in the local PUBLIC Schools?

2. Parochial or private schools?

3. Students are often given the grades A, B, C, D and FAIL to denote the quality of their work. Suppose the PUBLIC schools themselves, in this community, were graded in the same way. What grade would you give the public schools here -- A, B, C, D or FAIL?

4. What do you think are the biggest problems with which the PUBLIC schools in this community must deal?

5. Lack of discipline

6. Integration-Segregation problems

7. Lack of proper financial support

8. Difficulty in getting "good" teachers

9. Lack of proper facilities

10. Poor curriculum

11. Parents' lack of interest

12. Transportation

13. School Board policies

14. Pupils lack of interest-truancy

15. Use of dope, drugs

16. Communication problems, lack of being informed

17. Parents involvement in school activities, "they want to take charge"

18. Bussing

19. Crime/vandalism

20. Drinking/alcoholism

21. Teachers lack of interest

22. Mismanagement of funds/program/taxes/teachers unions/teachers salaries

23. Too many schools/declining enrollment

24. There are no problems

25. Miscellaneous

26. Don't know/no answer

27. In politics, as of today, do you consider yourself a Republican, Democrat, or Independent?

28. What is your religious preference -- Protestant, Roman Catholic, or Jewish?

29. Could you tell me the kind of business or industry the CHIEF WAGE EARNER in your immediate family works in and the kind of work he does there?

    Professional
    Farmers
    Business, Executive
    Clerical
    Sales Workers
    Skilled Workers
    Unskilled workers, operatives
    Service workers
    Farm laborers
    Laborers, except farm and mine
    Non-labor force
    Undesignated

30. Would you please give me the letter of the group which best represents the total annual income, before taxes, of all the members of your immediate family living in your household?

Under $2,000 a year
$ 2,000 to $ 2,999 a year
$ 3,000 to $ 3,999 a year
$ 4,000 to $ 4,999 a year
$ 5,000 to $ 5,999 a year
$ 6,000 to $ 6,999 a year
$ 7,000 to $ 9,999 a year
$ 10,000 to $11,999 a year
$ 12,000 to $14,999 a year
$ 15,000 to $19,999 a year
$ 20,000 and more a year
Don't know

31. What was the last grade or class you COMPLETED in school?

None, or grades 1-4
Grade 5, 6, 7
Grade 8
High School, incomplete Grade 9-11
High School, Grade, Grade 12
Technical, Trade, or Business
College, University inc.
College, University grad.
No Answer

32. What is your age?

Actual age coded

33. Decile age?

18-19
20-29
30-39
40-49
50-59
60-69
70-79
80-89
90-99
No answer

34. Race and sex

White man
White woman
Black man
Black woman
Other man
Other woman

35. Race

White
Black
Other

36. Sex

Male
Female

37. City Size

Farm resident
Open country, non-farm
Places under 2,500
2,500 to 4,999
5,000 to 9,999
10,000 to 24,999
25,000 to 49,999
50,000 to 99,999 and sub.
100,000 to 249,999 and sub.
250,000 to 499,999 and sub.
500,000 to 999,999 and sub.
1,000,000 and over and sub.

38. Region

New England
Middle Atlantic
East Central
West Central
South
Southwest
Rocky Mountain
Pacific

39. State

Maine
New Hampshire
Vermont
Massachusetts
Rhode Island
Connecticut
New York
New Jersey
Pennsylvania
Maryland
West Virginia
District of Columbia
Ohio
Michigan
Indiana
Illinois
Wisconsin
Minnesota
Iowa
Missouri
North Dakota
South Dakota
Nebraska
Kansas
Virginia
North Carolina
South Carolina
Georgia
Florida
Kentucky
Tennessee
Alabama
Mississippi
Arkansas
Louisiana
Oklahoma
Texas
Arizona
Colorado
Idaho
Utah
New Mexico
California
Oregon
Washington
Hawaii

BIBLIOGRAPHY

Bureau of the Census, 1970 Detailed Population Characteristics, Washington: U.S. Department of Commerce, 1970.

Bureau of the Census, 1980 Detailed Population Characteristics, Washington: U.S. Department of Commerce, 1980.

Elam, S.M. (ed.), A Decade of Gallup Pools of Attitudes Toward Education 1969-1978, Bloomington, Indiana, Phi Delta Kappa, 1978.

Elam, S.M. (ed.), Gallup Pools of Attitudes Toward Education 1969-1984, A Topical Summary, Bloomington, Indiana , Phi Delta Kappa, 1984.

Hatley, R.V., and Croskey, F.L., Measuring Community Attitudes Toward Education, NASSP Bulletin, 1978, 62, pp. 59-64.

Illinois State Board of Education, Tax Referenda Data for 1980-81, 1981-82, 1982-83, Springfield, Illinois, 1984.

Magmer, J.R., Douglas, D., Wherry, H.H., Ross, V.M., Non-Parents and Schools: Creating A New Team, Arlington, Virginia: National School Public Relations Association, 1982.

National Center For Educational Statistics, Digest of Education Statistics, 1981, Washington: U.S. Department of Education, 1981.

National Center for Educational Mtatistics, Digest of Education Statistics, 1981, Washington: U.S. Department of Education, 1983-84.

National Commission on Excellence in Education, A Nation at Risk: The Imperative for Educational Reform.

Raywid, M.A., In Pursuit of Confident Education, Principal, 1980, 60 (2), pp. 8-14